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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

WALLS, D

ART UNIT

PAPER NUMBER

1731

DATE MAILED:

10/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/624,820

Applicant(s)

Dube et al

Examiner

Dionne A. Walls

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1 ☐ Certified copies of the priority documents have been received.

2 ☐ Certified copies of the priority documents have been received in Application No. _____.

3 ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2

20) ☐ Other:

Art Unit: 1731

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by Diaz (US. Pat. No. 3,112,754).

Diaz discloses a method of making a tobacco substitute that may be deposited on a fibrous medium, such as tobacco leaf, and subsequently shredded for further use in a smoking article. The method includes applying caramelized sucrose (corresponding to the claimed "reducing sugar"), in the amount of 8.2 - 40.3 parts by weight (corresponding to the claimed "about 5% to about 8% by weight"), to the tobacco substitute (see col. 1, lines 33-36, col. 2, lines 57-70).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 1731

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 10, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diaz (US. Pat. No. 3,112,754) in view of Anwar et al (US. Pat. No. 3,622,343).

While Diaz may be silent as to whether the caramelized sucrose added to its tobacco mixture consists essentially of sucrose and a hydroxide of an alkali metal. Anwar et al discloses the fact that caramel, which results from the heating of materials such as sucrose, can also include an alkali, such as sodium hydroxide - which is added during the heat treatment (col. 2, lines 1-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the caramelization process of Diaz to include the addition of sodium hydroxide with the sucrose, already disclosed, in order that the caramelization process may be further assisted by this material as taught in Anwar et al.

5. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diaz (US. Pat. No. 3,112,754) in view of the Encyclopedia of Food Science, Food Technology and Nutrition (EFSFTN).

Regarding claim 4, while Diaz may not disclose that the agent which is caramelized, in its invention, is fructose, the EFSFTN discloses that fructose, in addition to sucrose, are prime sources for the manufacture of caramel (see page 662). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Diaz by

Art Unit: 1731

substituting sucrose, with fructose, as the caramelized agent to be added to the tobacco leaf because fructose is a conventional sugar used in the caramelizing process.

Regarding claims 5-6, the EFSFTN discloses that the temperature range of the heat treatment of caramelization process is between 180 - 250 degrees C (corresponding to the claimed "heat treatment is conducted at a temperature of at least about 150 degrees C /175 degrees C") (page 663) . Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate this temperature range into the caramelization process of Diaz since this is the conventional temperature to effectuate such a caramelization.

Regarding claim 7, the EFSFTN discloses that the caramelization process can be carried out under normal, reduced or enhanced pressure (page 663). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to arrive at the claimed 20 psig - 500 psig range under which to carry out the process, after minimal experimentation, to achieve the optimal pressure parameter for the caramelization process.

Lastly, regarding claim 8, the EFSFTN discloses that the increase in the color of the caramelized product is proportional to the time of the process (page 663). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to arrive at the claimed 10 minutes time period for the heat treatment of caramel based on the amount of color desired for the final caramel product.

Art Unit: 1731

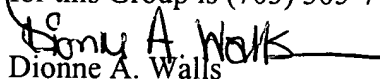
6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diaz (US. Pat. No. 3,112,754) in view of Anwar et al (US. Pat. No. 3,622,343), further in view of the Encyclopedia of Food Science, Food Technology and Nutrition (EFSFTN).

The EFSFTN discloses that the temperature range of the heat treatment of caramelization process is between 180 - 250 degrees C (corresponding to the claimed "heat treatment is conducted at a temperature of at least about 175 degrees C") (page 663) . Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate this temperature range into the caramelization process of Diaz modified by Anwar et al since this is the conventional temperature to effectuate such a caramelization.

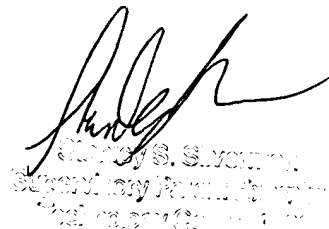
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dionne A. Walls whose telephone number is (703) 305 - 0933. The examiner can normally be reached Monday-Thursday from 6:30AM - 4:00PM (EST). The examiner can also be reached on alternate Fridays.

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached at (703) 308-3837. Additionally, the fax number for this Group is (703) 305-7718.


Dionne A. Walls

October 22, 2001


Stanley Silverman
Supervisor